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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,598	10/12/2001	Richard Boyd	156857-0044	3291

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EXAMINER

HUYNH, PHUONG N

ART UNIT PAPER NUMBER

1644

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/976,598	<b>Applicant(s)</b> BOYD, RICHARD	
	<b>Examiner</b> Phuong Huynh	<b>Art Unit</b> 1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE One MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

1. The location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1644, Group 1640, Technology Center 1600.
2. Please note that misnumbered claim 30 should have been claim 25.
3. Claims 1-25 are pending.

***Election/Restrictions***

4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-10, and 13-17, drawn to **a method for prevention of infection** of a patient by an infecting agent comprising reactivating the patient's thymus through administration of a LHRH analogs wherein the analog is **LHRH agonist**, and further delivering at least one cytokine, at least one growth factor or a combination of at least one cytokine and at least one growth factor, classified in Class 424, subclass 185.1.
  - II. Claims 1-9, 11, and 13-17, drawn to **a method for prevention of infection** of a patient by an infecting agent comprising reactivating the patient's thymus through administration of a LHRH analogs wherein the analog is **LHRH antagonist** and further delivering at least one cytokine, at least one growth factor or a combination of at least one cytokine and at least one growth factor, classified in Class 424, subclass 184.1.
  - III. Claims 1-8, and 13-17, drawn to **a method for prevention of infection** of a patient by an infecting agent comprising reactivating the patient's thymus through administration of **anti-LHRH vaccines**, and further delivering at least one cytokine, at least one growth factor or a combination of at least one cytokine and at least one growth factor, classified in Class 424, subclass 130.1.
  - IV. Claims 1-10, and 13-17, drawn to **a method for prevention of infection** of a patient by an infecting agent comprising reactivating the patient's thymus through administration of a combination of LHRH analogs wherein the analog is **LHRH agonist and anti-LHRH vaccines**, and further delivering at least one cytokine, at least one growth factor or a

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combination of at least one cytokine and at least one growth factor, classified in Class 424, subclass 184.1.

- V. Claims 1-9, 11, and 13-17, drawn to **a method for prevention of infection** of a patient by an infecting agent comprising reactivating the patient's thymus through administration of a combination of LHRH analogs wherein the analog is **LHRH antagonist and anti-LHRH vaccines**, and further delivering at least one cytokine, at least one growth factor or a combination of at least one cytokine and at least one growth factor, classified in Class 424, subclass 184.1.
- VI. Claims 1-6, 12, and 18-24, drawn to **a method for prevention of infection** of a patient by an infecting agent comprising reactivating the patient's thymus through **surgical castration** of the patient, and further delivering at least one cytokine, at least one growth factor or a combination of at least one cytokine and at least one growth factor, classified in Class 424, subclass 184.1.
- VII. Claim 25, drawn to a **method for enhancing bone marrow productivity** in a patient comprising the step of administering a specific LHRH analog to the patient classified in Class 424, subclass 184.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups I-V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the methods of prevention infection with different products (LHRH agonist versus LHRH antagonist), which differ with respect to their structure and physiochemical properties and mode of action, that is mutually exclusive.

Inventions of Groups I-VII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the methods of prevention infection versus the method for enhancing bone marrow productivity differ with their respect to their process steps and endpoints. Further, a prior art search also requires a literature search. It is a burden for the Examiner to search more than one invention. Therefore, they are patentably distinct.

5. Because these inventions are distinct for the reasons given above and the searches are not co-extensive, restriction for examination purposes as indicated is proper.
6. Irrespective of whichever group the applicant may elect, the applicant is further required under 35 U.S.C. 121 to elect:  
If Group I, II, III, IV, V or VI is elected, the Applicant is required to elect (1) a specific combination of cytokine such as the ones recited in claim 14, and a specific growth factor such as the ones recited in claim 15, (2) whether the cytokine and/or growth factor is deliver before, during or after administration of LHRH analog, anti-LHRH or the combination thereof, (3) a specific cell type such as the ones recited in claim 18 that genetically modified with (4) a specific virus such as the ones recited in claim 24. These cytokines and growth factors differ with respect to their structures and physiochemical properties. Therefore, they are patentably distinct.
7. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1, 10, and 11 are generic.
8. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.
9. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).
10. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

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11. Due to the complexity of the claimed invention an oral restriction was not made.
12. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.
13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Huynh "NEON" whose telephone number is (703) 308-4844. The examiner can normally be reached Monday through Friday from 9:00 am to 5:30 p.m. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.
15. Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

Phuong N. Huynh, Ph.D.

Patent Examiner

Technology Center 1600

July 28, 2003

  
**CHRISTINA CHAN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1600**